

**WHAT IS CLAIMED IS:**

1           1.     An apparatus for use in managing the cost of a business process, comprising:  
2                 means for receiving a discontinuous cost function that describes the costs associated  
3     with the business process as a function of one or more operational parameters;  
4                 means for finding the minimum cost point of the cost function, including  
5                     means for dividing the cost function into continuous sections,  
6                     means for calculating the point of minimum cost for each section, and  
7                     means for selecting the point of minimum cost having the lowest value; and  
8                 means for applying to the business process the operational parameters corresponding  
9     to the selected point of minimum cost.

1           2.     The apparatus of claim 1, wherein means for calculating comprises:  
2                 means for choosing a plurality of control points for each section; and  
3                 means for generating one or more approximations for each section based on the  
4     control points in that section.

1           3.     The apparatus of claim 2, wherein means for generating comprises:  
2                 means for selecting sets of the control points; and  
3                 means for generating one of the one or more approximations for each set of control  
4     points.

1           4.     The apparatus of claim 3, wherein means for calculating the point of  
2     minimum cost for each approximation comprises:  
3                 means for finding a point of zero slope on the approximation.

1           5.     The apparatus of claim 4, wherein means for generating one of the one or  
2     more approximations comprises:  
3                 means for calculating an interpolation function based on the control points.

1           6.     A method for use in managing the cost of a business process, comprising:

2 receiving a discontinuous cost function that describes the costs associated with the  
3 business process as a function of one or more operational parameters;  
4 finding the minimum cost point of the cost function, including  
5 dividing the cost function into continuous sections,  
6 calculating the point of minimum cost for each section, and  
7 selecting the point of minimum cost having the lowest value; and  
8 applying to the business process the operational parameters corresponding to the  
9 selected point of minimum cost.

1 7. The method of claim 6, wherein calculating comprises:  
2 choosing a plurality of control points for each section; and  
3 generating one or more approximations for each section based on the control points in  
4 that section.

1 8. The method of claim 7, wherein generating comprises:  
2 selecting sets of the control points; and  
3 generating one of the one or more approximations for each set of control points.

1 9. The method of claim 8, wherein calculating the point of minimum cost for  
2 each approximation comprises:  
3 finding a point of zero slope on the approximation.

1 10. The method of claim 9, wherein generating one of the one or more  
2 approximations comprises:  
3 calculating an interpolation function based on the control points.

1 11. A computer program product, tangibly stored on a computer-readable  
2 medium, for use in managing the cost of a business process, comprising instructions operable  
3 to cause a programmable processor to:  
4 receive a discontinuous cost function that describes the costs associated with the  
5 business process as a function of one or more operational parameters;  
6 find the minimum cost point of the cost function, including

7 divide the cost function into continuous sections,  
8 calculate the point of minimum cost for each section, and  
9 select the point of minimum cost having the lowest value; and  
10 apply to the business process the operational parameters corresponding to the selected  
11 point of minimum cost.

1 12. The computer program product of claim 11, wherein instructions operable to  
2 cause a programmable processor to calculate comprise instructions operable to cause a  
3 programmable processor to:  
4 choosing a plurality of control points for each section; and  
5 generating one or more approximations for each section based on the control points in  
6 that section.

1 13. The computer program product of claim 12, wherein instructions operable to  
2 cause a programmable processor to generating comprise instructions operable to cause a  
3 programmable processor to:  
4 select sets of the control points; and  
5 generate one of the one or more approximations for each set of control points.

1 14. The computer program product of claim 13, wherein instructions operable to  
2 cause a programmable processor to calculate the point of minimum cost for each  
3 approximation comprise instructions operable to cause a programmable processor to:  
4 find a point of zero slope on the approximation.

1 15. The computer program product of claim 14, wherein instructions operable to  
2 cause a programmable processor to generate one of the one or more approximations comprise  
3 instructions operable to cause a programmable processor to:  
4 calculate an interpolation function based on the control points.